ABSTRACT OF THE DISCLOSURE

In a fluid heating apparatus, a heat protect temperature sensor indirectly detects temperature of fluid heated by an electric heater adjacent to the electric heater. Also, a heated fluid sensor detects the temperature of the fluid adjacent to a fluid inlet of a heat exchanger. When it is determined that the temperature difference between the detected temperatures exceeds a predetermined level, electric power supply to the electric heater is discontinued. Thus, boil-dry is restricted early with a simple means.